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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KEVIN THORNBERRY

Appeal 2016-002807
Application 13/461,564
Technology Center 2400

Before THU A. DANG, CATHERINE SHIANG, and SCOTT E. BAIN, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

A. INVENTION

According to Appellant, the invention relates to "playing video in reverse at a faster than normal speed" (Spec. 1, ll. 5–7).

B. ILLUSTRATIVE CLAIM

1. A method to play video in reverse, comprising:

decoding a first plurality of bits of a video data stream into a first sequence of presentable frames ordered for forward play from frame (Y + 1) to frame Z, wherein Y and Z are integers, and Z is larger than Y;

storing the first sequence of presentable frames in a first buffer;

decoding a second plurality of bits of the video data stream into a second sequence of presentable frames ordered for forward play from frame (X+ 1) to frame Y, wherein X is an integer, and Y is larger than X;

storing the second sequence of presentable frames in a second buffer;

retrieving the first sequence of presentable frames from the first buffer;

outputting the first sequence of presentable frames as a reverse playing video stream of frames ordered frame Z to (Y + 1);

retrieving the second sequence of presentable frames from the second buffer; and

outputting the second sequence of presentable frames as a reverse playing video stream of frames ordered Y to X + 1.

C. REJECTION

Claims 1–20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the teachings of Appellant's Admitted Prior Art (AAPA) and Fukuchi et al. (US 5,751,888, issued May 12, 1998).

II. ISSUES

The principal issues before us are whether the Examiner erred in finding that the combination of AAPA and Fukuchi teaches or suggests "decoding a first plurality of bits" of a video data stream "into a first sequence of frames ordered for forward play from frame (Y+1) to frame Z;" "decoding a second plurality of bits" of the video data stream "into a second sequence of presentable frames ordered for forward play from frame (X+1) to frame Y;" "outputting the first sequence of presentable frames as a reverse playing video stream of frames ordered frames Z to (Y+1);" and "outputting the second sequence of presentable frames as a reverse playing video stream of frames ordered Y to X+1" (claim 1). In particular, the issues turn on whether AAPA discloses or suggests decoding first and second bits of data stream into sequence of frames ordered for forward play, and outputting the first and second sequences as reverse playing video streams of frames.

III. FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Appellant's Admitted Prior Art (AAPA)

1. According to Appellant, a conventional entertainment device 114 includes an input circuit 117 to receive a stream of video data 108, 110 (Spec. 3, ll. 17–18), and a video decoder module 119 to parse a video data stream into constituent frames and decode constituent frames to produce presentable video frames (Spec. 4, ll. 11–13), wherein a user may direct the entertainment device 114 to record multimedia content, fast-forward and

reverse play the content, and otherwise control the storage and delivery of multimedia content (Spec. 5, ll. 15–17).

Fukuchi

2. Fukuchi discloses a digital video playback apparatus that has a reverse reproduction function, such that, to reversely reproduce the recorded moving pictures, stored pictures are read in the opposite direction with respect to time, and to achieve this reverse reproduction function, additional memory is provided (col. 2, ll. 16–35).

IV. ANALYSIS

Appellant contends, "[t]he language of claim 1 requires out-of-order decoding" (App. Br. 22). In particular, Appellant points to Appellant's Fig. 7A for illustrating "a non-limiting embodiment of the out-of-order processing" wherein "a first sequence of packets 152 is decoded and a first sequence of decoded frames is stored in buffer 132," and then "a second sequence of packets 154 is decoded and a second sequence of decoded frames is stored in buffer 134" (*id.*). Appellant contends AAPA's Fig. 4 expressly describes "in-order" processing instead (App. Br. 23).

Appellant further contends AAPA also does not teach out-of-order presentation (App. Br. 24). Again, Appellant refers to the exemplary embodiment in Fig. 7A of Appellant's Specification, and contends "frames from the decoded first sequence are retrieved from buffer 132 in reverse order and output to a presentation device as a reverse playing video stream of frames," and then "frames form the decoded second sequence are retrieved and output" (*id.*, emphasis omitted).

We have considered all of Appellant's arguments and evidence presented. However, we disagree with Appellant's contentions regarding the

Examiner's rejections of the claims. Instead, we agree with the Examiner's findings, and are unpersuaded of error with respect to the Examiner's conclusion that the claims would have been obvious over AAPA in view of Fukuchi.

As an initial matter of claim construction, we give the claim its broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). However, "limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citations omitted).

Although Appellant contends that "[t]he language of claim 1 requires out-of-order decoding" (App. Br. 22), such contention is not commensurate with the recited language of the claim. In particular, we agree with the Examiner that "out-of-order" decoding is not recited in claim 1 (Ans. 4). We agree with the Examiner that "Appellant touts an improvement in that groups of pictures are processed out-of-order, but fails to claim it" (Ans. 3). That is, we agree with the Examiner that claim 1 "merely recites the decoding elements in a writing order without limiting the method to either a processing order or parallel implementation" (Ans. 5).

As to Appellant's references to Fig. 7A of the Specification (App. Br. 22 and 24), as the courts stressed, "limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d at 1184. We agree with the Examiner's that a broad but reasonable interpretation of the claims is "consistent with embodiments in [the] Specification" (Ans. 9).

Although Appellant contends "claim 1 expressly recites decoding a first plurality, *and then* claim 1 recites decoding a second plurality" (App. Br. 22, emphasis omitted and added), we note claim 1 does not require that

the second plurality is decoded *after* the first plurality. That is, claim 1 merely recites two decoding steps, but does not require that one of the steps is performed before or after the other, or that one of the step is dependent on the other occurring first.

We agree with the Examiner's finding that "AAPA both supports and teaches the claim embodiments directed to reverse order play" (Ans. 4; FF 1). In particular, we agree with the Examiner's broadest, reasonable interpretation that claim 1 merely requires "forward decoding a general sequence of frames located near other sequence of frames" for first and second bits of video data streams (Final Act. 7), storing the sequences, and then retrieving the sequences for outputting the sequences as reverse playing video streams (Final Act. 8) .

Although the Examiner points out that "AAPA does not explicitly teach an embodiment that decodes entire groups of pictures (GOP), stores the decoded images and then plays the GOPs and the images in the GOPs in reverse order," we find no error with the Examiner's reliance on Fukuchi for disclosing such limitations (Final Act. 9). In particular, the Examiner finds, and we agree, "Fukuchi teaches this embodiment in the context of reverse play of digital video" (*id.*; Ans. 8; FF 2).

On this record, we find no error with the Examiner's finding that the combination of AAPA and Fukuchi teaches or at least suggests the contested claim limitations. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

We note Appellant also contends the Examiner's motivation to combine AAPA with Fukuchi is improper because the relied portions "come from Fukuchi's own admitted prior art," wherein "the application of

Fukuchi's motivation as[sic] asserted in the Office Action would create an entirely different device" (App. Br. 25–26). However, Appellant appears to view the combination from a different perspective than the Examiner. Here, the Examiner relies on Fukuchi for the well-known teaching of decoding "entire groups of pictures (GOP)" (Ans. 9; FF 2). We find no error with the Examiner's finding that it would have been obvious to "modify AAPA to decode entire groups of pictures (GOP), store the decoded images and then play all the images in reverse order" in order "to perform a smooth reverse reproduction" (*id.*). That is, the Examiner has provided sufficient articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

Although Appellant additionally argues that Fukuchi does not teach the highlighted features of dependent claims 3 and 4 (App. Br. 26–27), we find no error with the Examiner's conclusion that the contested limitations also would have been obvious over the cited references (Final Act. 9–10; Ans. 13–15). That is, the Examiner finds "Fukuchi describes the actual process" (Ans. 15, emphasis omitted.) Therefore, we adopt the Examiner's findings with respect to claims 3 and 4, which we incorporate herein by reference.

On this record, we are unconvinced of Examiner error in the rejection of independent claim 1, and claims 2–9 depending therefrom and falling therewith (App. Br. 25) over AAPA and Fukuchi.

Appellant also add that the Final Office Action does not address any teaching in AAPA or Fukuchi wherein the output and decoding of the video data are "performed concurrently" (App. Br. 28), and that a teaching of an OSD (on-screen display) "is not identified" therein (App. Br. 29), as

required in claim 10. Appellant additionally argues that Fukuchi does not teach the highlighted features of claim 13 depending from claim 10 (App. Br. 29). We also find no error with the Examiner's conclusion that the contested limitations also would have been obvious over the cited references (Final Act. 11–14; and Ans. 16–18). We are unpersuaded of error with the Examiner's finding "Fukuchi describes the actual configuration" (Ans. 16–18, emphasis omitted.) Therefore, we also adopt the Examiner's findings regarding claims 10 and 13, which we incorporate herein by reference. Thus, we are unpersuaded of error in the rejection of claim 10 and claims 11–15 depending therefrom (App. Br. 29) over AAPA and Fukuchi.

Although Appellant contends claim 16 stands alone, Appellant does not provide substantive arguments for claim 16 separate from claim 1 (App. Br. 29–30). Appellant then additionally argues that Fukuchi does not teach the highlighted features of dependent claim 18 (App. Br. 30). However, we find no error with the Examiner's conclusion that the contested limitations also would have been obvious over the cited references (Final Act. 13; Ans. 19). Therefore, we adopt the Examiner's findings with respect to claims 16 and 18, which we incorporate herein by reference. Thus, we are unpersuaded of error in the rejection of claim 16 and claims 17–20 depending therefrom (App. Br. 30) over AAPA and Fukuchi.

V. CONCLUSION AND DECISION

We affirm the Examiner's rejections of claims 1–20 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED